

Remarks

Applicants respectfully request reconsideration of the rejection of the claims in view of the above amendments and the remarks set forth below. Claims 1-20 remain in the application. Claims 1-20 were previously presented.

35 U.S.C. §103

Claims 1-20 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over Griffiths (US 6,262,776 B1) in view of Sackstein et al. (US 6,744,815 B1). Under U.S.C. § 103, the prior art reference (or references when combined) must teach or suggest all of the claim limitations (MPEP § 706.02(j)). Claim 1 recites, inter alia, a “system that maintains synchronization between a video signal and an audio signal that are processed using audio and video clocks that are locked, the system comprising...a component that determines an initial audio input buffer level...a component that determines an amount of drift in the initial audio input buffer level and adjusts the locked audio and video clocks to maintain the initial audio input buffer level if the amount of drift reaches a first predetermined threshold...and a component that measures a displacement of a video signal associated with the audio signal in response to the adjusting of the locked audio and video clocks and operates to negate the measured displacement of the video signal if the measured displacement reaches a second predetermined threshold.” (Emphasis added).

The claimed invention, as set forth in claim 1, is directed towards a system that maintains synchronization between a video signal and an audio signal that are processed using locked audio and video clocks. If a predetermined amount of drift between audio and video is detected (by observing a change in the initial audio input buffer level), the locked audio and video clocks are adjusted to maintain the initial audio input buffer level. If the video signal is displaced too much (i.e., exceeds a second predetermined threshold) due to the adjustment of the locked audio and video clocks, the displacement of the video signal is negated by, for example, restarting the synchronization process or dropping a video frame from the video signal.

Griffits appears to disclose a system and method for maintaining synchronization between audio and video by playing video frames early, dropping video frames or delaying the playing of video frames. (See, e.g., col. 12, lns. 28-40 and 56-64; col. 15, lns 39-42; col. 16, lns. 38-45) In other words, Griffits appears to only disclose adjusting the display of video data and not adjusting locked audio and video clocks in order to maintain synchronization between audio and video data. Indeed, as acknowledged in the Office Action Griffits does not disclose the use of locked audio or video clocks.

Sackstein et al. appears to disclose a method for synchronizing and encoding audio and video streams. The Office Action proposes that Sackstein et al. teaches adjusting locked audio and video clocks. Applicants respectfully disagree. As noted in the office action, Sackstein et al. states, in col. 9, lines 54-62, that “If DIFFos is positive (as is the case in the sample above) the controller deduces that the video clock is effectively running faster than the audio clock. In this case the number of audio samples should be increased to effectively speed up the audio clock. If DIFFos is negative the controller deduces that the video clock is effectively running slower than the audio clock. In this case the number of audio samples should be decreased to effectively slow down the audio clock.” However, nowhere in Sackstein et al. is adjusting the locked audio clock 114 and video clock 124 to increase or decrease the number of audio samples taught or suggested. Indeed, Sackstein et al. teaches effectively speeding up or slowing down the audio clock, from col. 9, line 66 to col. 10, line 5, by the controller providing “a command to the audio compressor 116 to increase or decrease the number of audio sample by at least one audio sample.” Furthermore, Sackstein et al., at col. 8, lines 30-37 and lines 48-59, lists numerous ways in which the buffer 115 in the compressor 116 can be manipulated to increase or decrease the number of audio samples. Nowhere does Sackstein et al. teach or suggest the “component that...adjusts the locked audio and video clocks” element of claim 1.

Applicants are unsure what the combination of Griffits’ system and Sackstein’s audio compression process would result in, however, Applicants’ respectfully propose that such a combination would fail to teach or suggest the “system that maintains synchronization between

a video signal and an audio signal that are processed using audio and video clocks that are locked, the system comprising...a component that determines an initial audio input buffer level...a component that determines an amount of drift in the initial audio input buffer level and adjusts the locked audio and video clocks to maintain the initial audio input buffer level if the amount of drift reaches a first predetermined threshold...and a component that measures a displacement of a video signal associated with the audio signal in response to the adjusting of the locked audio and video clocks and operates to negate the measured displacement of the video signal if the measured displacement reaches a second predetermined threshold” elements of claim 1. Therefore, it is respectfully proposed that the rejection of claim 1 under 35 U.S.C. § 103(a) is overcome in accordance with the above amendment and remarks and notice to that effect is earnestly solicited.

Dependent claims 2-6 being dependent on and further limiting independent claim 1, should be allowable for that reason, as well as for the additional recitations that they contain. Applicants respectfully requests reconsideration of the rejection of the claims in view of the above remarks.

Independent claim 11 contains elements similar to independent claim 1 and should be allowable for the reasons discussed above. Therefore, it is respectfully proposed that the rejection for obviousness is overcome.

Dependent claims 12-14 being dependent on and further limiting independent claim 11, should be allowable for that reason, as well as for the additional recitations that they contain. Applicants respectfully requests reconsideration of the rejection of the claims in view of the above remarks.


Independent claim 15 contains elements similar to amended independent claim 1 and should be allowable for the reasons discussed above. Therefore, it is respectfully proposed that the rejection for obviousness is overcome.

Dependent claims 16-20 being dependent on and further limiting independent claim 15, should be allowable for that reason, as well as for the additional recitations that they contain. Applicants respectfully requests reconsideration of the rejection of the claims in view of the above remarks.

Having fully addressed the Examiner's rejections it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the applicant's attorney at (818) 480-5223, so that a mutually convenient date and time for a telephonic interview may be scheduled.

No fee is believed due other than the fees discussed above. However, if an additional fee is due, please charge the additional fee to Deposit Account 07-0832.

Respectfully submitted,
Phillip Aaron Junkersfeld et al.

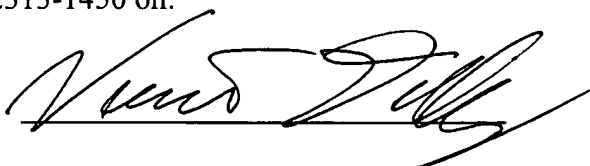
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June 11, 2009

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I hereby certify that this amendment is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

Date: June 11, 2009





MAILING TO U.S. Patent and Trademark Office

Report to Data Base
Docket No. **P0000447**
Inventor(s): **Philip Anton Tunkersfeld et al.**
Title: **A Method and System For Maintaining Lip Synchronization**
Serial No. **10/531,695** Filed: **4/18/2005**
Patent No. _____
Atty: Vincent E. Duffy

PATENT OPERATIONS

Enter Date		Enter Number	Check Type	Check Items Mailed with Application
		Independent Claims	<input type="checkbox"/> Original-US Nat'l	<input type="checkbox"/> Declaration
		Claims in Excess 20	<input type="checkbox"/> Divisional	<input type="checkbox"/> Statement under CFR § 1.56-013M
		Claim Pages	<input type="checkbox"/> Continuation	<input type="checkbox"/> Assignment & Recordation Sheet
		Specification Pgs	<input type="checkbox"/> CPA/RCE	<input type="checkbox"/> Preliminary Amendment
		Sheets of Drawings	<input type="checkbox"/> Reissue	<input type="checkbox"/> Priority Document -
		Abstract Pages	<input type="checkbox"/> Re-Exam	<input type="checkbox"/> IDS 1449 with References
			<input type="checkbox"/> US Provisional	<input type="checkbox"/> Utility Application Transmittal
Charge		<input type="checkbox"/>		
Mailed				
		AMENDMENTS		
		After Rejection		
		After Final Rejection		
		After Allowance UIR312		
		Supplemental		
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		Statement under §1.56		
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